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**Sustainability Initiatives of Emory
University**



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Initiatives Durables de l'Université Emory

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Résumé : L'objectif de cette fiche est de résumer les initiatives durables de l'Université Emory. L'Université Emory place la durabilité au centre de ses préoccupations et de son développement, afin de devenir un modèle de vie saine. Elle a lancé six initiatives dans les domaines suivants : conservation de l'eau, de l'énergie, bâtiments et espaces verts, recyclage, transport alternatif, et nourriture durable.

Mots clés : Développement durable, Communauté, Environnement

Sustainability Initiatives of Emory University

This review was presented in the “Global challenges” course of Denis Bourgeois, David Khoudour-Castéras and Thanh Nghiem. This course is part of the “Alternative Management” specialization of the third-year HEC Paris business school program.

Abstract: The objective of this review is to sum up the Sustainability Initiatives of Emory University. Emory University takes the sustainability as an important school strategy. With a goal of being a model of healthy living, Emory University developed six main programs in water saving, energy conservation, green building and green space construction, recycling, alternative transportation and sustainable food.

Key words: Sustainability, Community, Environment

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1. Elementary background

The office of Sustainability Initiatives of Emory University was founded in September 2006 with the objective to help restore the global ecosystem, foster healthy living, and reduce the University's impact on the local environment.

Emory University, located in Atlanta, Georgia, is home to more than twelve thousands undergrad and graduate students and is deeply invested in the green revolution. The sustainability is the core of the school's strategy plan. All decisions made at Emory University have to correspond to the triple bottom line of sustainability: "*The intersections of social, economic, and environmental dimensions of sustainability.*"¹

The Sustainability Initiatives Office has established many projects in and out of University of Emory, all of which are making impressive progress. Within five years, the energy reservation program has economized more than fifteen percent of the energy used by the University in 2005. Only for the year 2008 to 2009, the Emory Recycle Program managed to divert forty-nine percent of University waste, which equals 7464.21 tons of material for recycling. Initiated in 2007, the water reservation program has reduced the water usage for more than thirty million gallons in all of Emory University's campuses. The Commute Options provides the "Cliff" shuttle system, a one hundred percent alternatively fueled system, to some two hundred and forty thousand faculty students and staff every month. Furthermore, the sustainable food program has redirected fifty-three percent of the cost of University's residential dining to local or sustainably-produced food.

In addition to all the environmental protection programs, Emory University has a famous curriculum program: Piedmont Project. With the goal of infusing sustainability in every campus of Emory University, this project has by now one hundred and forty eight participants and has established one hundred and thirty sustainability-related courses. These participants have been drawn from Law, Business, Public Health, Oxford and Emory College and all divisions of academic learning. Thirty-four of forty-three Emory departments have at least one course related to sustainability, which is a seventy-nine percent of participation.

Besides, the Sustainability Initiatives is an active cooperater of many local community programs. These include the recycling program of unused medical equipment, MedShare; the program of environmental research and knowledge sharing, the OUCP (Office of University-

¹ "Sustainability Initiatives", *Emory University*, <http://sustainability.emory.edu/page/1015/History> December 3, 2010.

Community Partnerships) and the Volunteer program providing services to improve the health care, urban housing, animal and wildlife protection, and environmental stewardship in the Greater Atlanta Community.

2. History

Before the Sustainability Initiatives Office was founded, there was an Ad Hoc Committee on Environmental Stewardship in Emory University. In 1999, the Emory University wants to design a road linking the new Clairmont campus with the main Clifton Road campus and parking deck. This project gives impetus to the formation of the Ad Hoc Committee to take into account more environmental issues, including reducing the environmental impact of the road building project.

Later on, the Ad Hoc Committee has developed several focuses of the campus environment. The first was the campus forest plan; this later became a restoration plan of Baker Woodland by removing invasive ivy and privet. The second one began in 2000 to create an Environmental Mission Statement for the University in order to have a platform where different units of the University could bring out environmental issues to the forefront. The third focus was the creation of a Faculty Green Lunch Group for that the environmental attendees of Emory University could get to know the latest research results on environmental topics by hearing diverse presentations. The discussions of the Group have lead to the emergence of Emory's curriculum development program for sustainability, the Piedmont Project.

Emory's Sustainability Initiatives are marked by its numerous green buildings in campus. The early effort towards the green building was inspired by a presentation of LEED (Leadership in Energy and Environmental Design) buildings. Several faculty members and students were sent to this presentation by Ad Hoc Committee and this idea of LEED buildings captured their attention. Later, Emory built its first LEED standard building, the Whitehead Medical Research Building, and established in 2001 a Board of Trustees for a commitment to LEED standards in all new building projects at Emory.

The program of energy saving was developed in 2002. Five electricity saving behaviors were written in a brochure and conferences, presentations were made to promote the idea to all the department members and students. Despite the growth of faculty member, staff,

machines in some buildings, the electricity usage went down by eight percent in the first year and by 6.7 percent in the second year. Meanwhile, many efforts were made during the early years of Ad Hoc Committee. The Recycling center was created, the Emory Shuttle System was developed and the recycled-content white paper was first taken into account.

A strategic planning process began at Emory in 2004 when sustainability emerged from a two-year process as a core commitment of the University. The Sustainability Committee at that moment made a report: "Sustainability Vision for Emory". This report aims at an educational model role of Emory University in the future, in the field of healthy living. *"Emory will collaborate with others beyond the University to provide leadership in sustaining and restoring all aspects of a healthy life: economic, environmental, and social."*² This report which defines the "triple sustainability line" as the guide of the progress is adopted by the president cabinet of Emory University. Up till today, it has a leading role of all the efforts made by Sustainability Initiatives of Emory University towards the protection of environment.

3. Missions and values

The Sustainability Initiatives are the supervisor of many programs in and out of campus of Emory University. The main efforts today are paid to the 6 following programs:

Recycling

The recycling program was initiated by a group of librarians who began to collect and recycle white paper in 1990. It expanded to the residence hall with the growing popularity of recycling among students. Now the Emory Recycles provides a source separated recycling program to all the academic buildings, residence halls, offices, clinics, etc.

Taking the residence hall as an example, in all new residence halls, a large multi-unit recycling container could be found in a room especially designed for the recycling. Cardboards could be left in the room for recycling. In the old residence buildings, containers for mixed paper, white paper, aluminum and plastics are available on every floor. And containers for glasses could be found outside the building. On the internet, students can read the indications of what and how to recycle. And for those leaving the residence, Emory Recycle suggests a donation of the unwanted clothing, household items or school supplies.

Emory University has a goal of reducing 65 percent of its waste from the landfills by 2015;

² "Sustainability Initiatives", *Emory University* <http://sustainability.emory.edu/page/1015/History> December 3, 2010.

compared to the level of waste in 2005. And every community member is responsible to help reduce the amount of waste through Reducing, Reusing and Recycling.

Green Building and Green Space

In 1999, The Emory University Board of Trustees adopted a no net loss (nnl) of forest canopy policy. This policy aims to maintain a stable environmental effect of the forest. The Emory No Net Loss Tree Group provides a replacement of trees removed during the development and an equally valuable understory, shrub, and groundcover vegetation. But most often is that the number of replacement trees requires is more than the building site can accommodate. In this situation, several formulas will be used to determine the how much money should be set aside from the building budget to accommodate the trees that will be planted off-site. The policy defines clearly the methods of calculations, the environmental value of the replacing trees and the operation of the No Net Loss Tree Bank. Besides, Emory University decides to devote half of its seven hundred acres of land undeveloped to the construction of green space.

The Emory University has by now six LEED (Leadership in Energy and Environmental Design) gold building, six LEED silver buildings, and three LEED certified buildings, it's "*one of the largest inventories by square footage of LEED-certified building space among campuses in America*"³. The cost of the green building was higher than normal building in the first place, but the economies of energies and money it made, later in use, largely compensate for the higher construction price.

Alternative Transportation

Emory University encourages its community members to work together to re-examine their modes of transportation, and to share at least part of their journey with others. For those single-occupancy vehicles, Emory proposes alternatives like car sharing program, and free transit passes on the city's MARTA transit system to staff. A public shuttle system is also available for its students, faculty and staff members. These shuttle buses are all fueled by natural gas, electricity and biodiesel. A bike program with free bike sharing and discounts of bikes are offered by Emory together with mobile bike repair stations.

³“Sustainability Initiatives”, *Emory University* <http://sustainability.emory.edu/page/1007/Green-Building/Green-Space>, December 3, 2010.

Sustainable Food

Emory's sustainability vision sets an ambitious goal of seventy-five percent local or sustainably grown food in its hospitals and cafeterias by 2015. Here the term “local” is defined as the high priority of buying from Georgia farmers and to buy as much food from the region near Emory University as possible. The sustainable food program is set to reduce the use of fossil fuels, improve human health, prevent harmful agriculture inputs and practices, and conserve biodiversity, etc.

Together with the sustainable food purchasing plan, a small group of farmer liaison is sent to present the Emory Sustainable Food Program to diverse agriculture group. Those cultivators who are interested in the program can have a producer guideline for becoming an Emory Food Supplier and to become a certified sustainable food grower with Food Alliance.

Water conservation

“Atlanta is the largest municipality reliant on the smallest single watershed in America.”⁴
Under this severe circumstance, the Emory University decided in 1995 to reduce its water consumption. In 2007, with the help of a consulting team, University developed a water management plan, including storm water management, waste-water management, and overall water conservation on Emory’s campuses.

Energy Awareness

Emory Sustainability Initiatives has a goal of reducing twenty-five percent of the energy use per square foot in all campuses by 2015 from the 2005 levels. New technologies are introduced together with the green building standards to reinsure the higher efficiency of energy usage of lighting, cooling, heating and ventilation. All members of the community are encouraged to do steps individuals can to prevent energy waste, such as turning of the light and computers after use.

In the same time, Emory Bio-inspired Renewable Energy Center is in search of a clean, cheap and sustainable energy source, using just sunlight and water to generate hydrogen fuel.

⁴ “Sustainability Initiatives”, *Emory University* <http://sustainability.emory.edu/page/1009/Water-Conservation>, December 3, 2010.

4. Analysis of the review's author

Emory University is not different from other American Universities, what it does now are applicable to all the other universities and institutions. But the Sustainability Initiatives have greatly changed the impact of the Campus life on its environment. Its efforts on sustainable food, green space building and the car and bike share program have made great contribution to the community.

First of all, Emory Sustainability programs motivate the community as a whole to participate and make efforts. Emory not only reduces its negative impact on the community, but also promotes positive projects to the community. Its research programs of green and sustainable energy and their purchase plan of local and sustainably grown food, both of them give an alternative to the unhealthy, energy-wasting life. It sets up a good role model who does the good and share the benefit with all. In this way, Emory's actions will receive more support from the local people and its students.

Secondly, the methods of achieving the goal are cheap. People may have a wrong idea that environmental and organic equal expensive. But in Emory University, the eco-friendly goes with saving money. From the car share program to the white paper recycle, programs either reduce the waste of money or economize a part of the budget for others uses. Take the storm water management as an example, over 350,000 gallons of collected rainwater through rainwater cisterns can be used to water campus trees and gardens. It saves both natural resource and money.

Finally, Emory tells the society that doing something for the sustainability is not very hard. Small changes make big progress. Even it's the old stuff like turning off the light and computer after use, or install low-flow shower heads and dual-flush toilets, everyone can contribute to the environment protection as long as he keeps in mind the principle and takes into action.

Innovation is good, but if we can save the planet by looking back to previous generations, and learn from them, it's even better. Take the bus to school, buy some local food, and pay attention to our electricity and water usage like our grand-parents did, we will be much healthier both mentally and physically.

The influence of a university is quite often important enough to modify the behavior of a community. And the young talents can, on one hand, contribute to the research and development, and on the other hand, take this idea of sustainability along in their lives.